

Environmental
Impact Statement

Record of Decision

in support of the
Environmental Impact Statement

S.R. 108 from S.R. 127 to S.R. 126 in
Davis and Weber Counties

Federal Highway Administration
Utah Department of Transportation



UDOT Project No. STP-0108(13)4E
FHWA-UT-EIS-07-3-F

October 28, 2008

Contents

1.0	DECISION	1
2.0	SAFETEA-LU SECTION 6002.....	2
3.0	ALTERNATIVES CONSIDERED (CHAPTER 2 OF THE FINAL EIS).....	3
3.1	Summary of the Alternative Development Process.....	3
3.1.1	Development of the Initial Alternatives.....	4
3.1.2	Level 1 Screening	5
3.1.3	Level 2 Screening	5
3.2	Alternatives Considered for Detailed Study	8
3.2.1	No-Action Alternative	8
3.2.2	Minimize 4(f) Impacts Alternative (Environmentally Preferred and Selected Alternative).....	9
3.2.3	West Alternative	9
4.0	SECTION 4(F) (CHAPTER 5 OF THE FINAL EIS).....	10
4.1	<i>De Minimis</i> Findings.....	10
4.2	Section 4(f) Use (Non-<i>De Minimis</i>)	10
4.2.1	Consideration of Avoidance Alternatives	11
4.2.2	Least Overall Harm Analysis.....	13
4.2.3	Measures To Minimize Harm to Section 4(f) Properties	15
5.0	MEASURES TO MINIMIZE HARM FROM THE SELECTED ALTERNATIVE (CHAPTER 4 OF THE FINAL EIS).....	17
5.1	Farmland Impacts	17
5.2	Community Impacts.....	18
5.3	Economic Impacts	19
5.4	Air Quality Impacts and Transportation Conformity	19
5.5	Noise Impacts.....	20
5.6	Water Quality Impacts	22
5.6.1	Surface Water	22
5.6.2	Groundwater Rights and Wells	22
5.7	Ecosystem Impacts	22
5.8	Historic, Archaeological, and Paleontological Impacts.....	23
5.9	Hazardous Waste Sites Impacts.....	24
5.10	Visual Impacts	25
5.11	Construction Impacts.....	25
5.11.1	Mitigation Measures for Public Impacts due to Construction.....	25
5.11.2	Mitigation Measures for Air Quality Impacts due to Construction.....	26
5.11.3	Mitigation Measures for Water Quality Impacts due to Construction.....	26
5.11.4	Mitigation Measures for Noise Impacts due to Construction.....	27
5.11.5	Mitigation Measures for Visual Impacts due to Construction.....	27

5.11.6	Mitigation Measures for Utility Service Impacts due to Construction.....	27
5.11.7	Mitigation Measures for Traffic Impacts due to Construction.....	27
5.11.8	Mitigation Measures for Economic Impacts due to Construction.....	28
5.11.9	Mitigation Measures for Hazardous Materials Impacts due to Construction.....	28
5.11.10	Mitigation Measures for Construction Staging and Material Borrow Areas.....	29
5.11.11	Mitigation Measures for Invasive Species Impacts due to Construction.....	29
5.12	Permits, Certifications, and Approvals (Chapter 4 of the Final EIS).....	30
6.0	MONITORING AND ENFORCEMENT PROGRAM.....	30
7.0	STATUTE OF LIMITATIONS.....	30
8.0	FINAL EIS COMMENTS AND RESPONSES.....	30
9.0	CONCLUSION	44
	APPENDIX A – S.R. 108 MITIGATION COMMITMENTS.....	45

Exhibits

Exhibit 3-1: Initial Alternatives.....	4
Exhibit 3-2: Evaluation of Alternatives Considered.....	5
Exhibit 3-3: Preliminary Five-Lane Alternatives	6
Exhibit 3-4: Summary of Impacts from the Preliminary Five-Lane Alternatives.....	6
Exhibit 3-5: Level 2 Screening Results (Evaluate Community and Environmental Impacts)	7
Exhibit 8-1: S.R. 108 Final EIS Response to Comments	32
Exhibit A-1: Summary of Mitigation Measures	45

1.0 Decision

This document is the Federal Highway Administration (FHWA) Record of Decision regarding the proposed State Route (S.R.) 108 project from S.R. 127 (Antelope Drive) to S.R. 126 (1900 West) in the cities of Syracuse, West Point, Clinton, Roy, and West Haven, Utah. This Record of Decision approves the selection of the Minimize 4(f) Impacts Alternative as the Preferred Alternative as identified in the Final Environmental Impact Statement (Final EIS) dated August 2008. This approval constitutes FHWA's acceptance of the Preferred Alternative as the Selected Alternative alignment for S.R. 108 and completes the approval process for the environmental evaluation.

This Record of Decision presents the basis for a decision to implement a transportation project consisting of the following elements:

- Construct a five-lane (110-foot) cross-section consisting of four 12-foot travel lanes, a 14-foot median (either a two-way left-turn lane or a raised center median), 8-foot shoulders, 4-foot bicycle lanes, 2.5-foot curb and gutter, 4.5-foot park strips, 4-foot sidewalks, and 1 foot between the back of the sidewalk and the edge of the right-of-way.
- Improve most intersections with dedicated right-turn and left-turn lanes. Dual left-turn lanes will be provided at 1700 South (southbound only), 1800 North, 5600 South, 4800 South, and 1900 West (eastbound only).
- Include enough shoulder width to accommodate bus service.
- Support bicycle use along S.R. 108 by providing Class II bicycle lanes.

This Record of Decision approves the full build-out of the selected alternative as evaluated in the Final EIS. The SR-108 Project as proposed is part of a fiscally constrained long range transportation plan (WFR 2007 Urban Area Regional Transportation Plan). However, the project will be built in phases based on available funding. UDOT will make interim improvements within the scope of the Final EIS to improve safety and reduce congestion. These improvements could include, full build-out of segments along the length of the roadway, widening the existing two-lane road to three lanes and constructing intersection improvements or other phasing as determined through engineering studies to best meet current needs while anticipating full build-out. UDOT anticipates that the full project scope will be completed as described in this Record of Decision well before 2035.

FHWA has carefully reviewed all concerns in the course of approving the Selected Alternative and has concluded that this alternative reasonably

maximizes the transportation benefit, minimizes environmental impacts, and effectively meets the project's purpose.

This Record of Decision is issued under the requirements of Chapter 40 of the Code of Federal Regulations (CFR) 1502.2 and Chapter 23 CFR 771.127. The following information in this Record of Decision is based on the information presented in the S.R. 108 Final EIS prepared by FHWA and the Utah Department of Transportation (UDOT) and released for public review during September and October 2008. The Final EIS and the entire project record are available for review upon request to the FHWA Utah Division.

2.0 SAFETEA-LU Section 6002

The public and agency involvement program for the S.R. 108 project was conducted in a manner consistent with National Environmental Policy Act (NEPA) and Section 106 regulations. The program was designed to be consistent with the Transportation Equity Act for the 21st Century (TEA-21) of 1998 and the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) of 2005. The participating agencies were notified of the requirements of SAFETEA-LU Section 6002 at the agency scoping meetings.

The S.R. 108 EIS process met the intent of this regulation by reaching out to agencies and the public and giving them an opportunity for involvement by providing input into and collaborating on the processes of defining the project purpose and need, defining the range of alternatives, and collaborating on the methodologies to be used when identifying the project alternatives. The participating agencies in the S.R. 108 process were:

- U.S. Fish and Wildlife Service
- Utah Transit Authority
- Utah State Historic Preservation Office
- Wasatch Front Regional Council
- City of Syracuse
- City of Roy
- City of West Point
- City of Clinton
- City of West Haven

3.0 Alternatives Considered (Chapter 2 of the Final EIS)

The primary purposes of the project are to improve local and regional mobility in Syracuse, West Point, Clinton, Roy, and West Haven; eliminate roadway deficiencies in order to reduce accident rates; and enhance the opportunities for multimodal use of S.R. 108 by providing improved bicycle, pedestrian, and transit facilities.

This Record of Decision is based on the consideration of the alternatives that were described and evaluated in Chapter 2, Alternatives, and Chapter 4, Environmental Consequences, of the Final EIS. As part of the initial alternative screening process, potential options were evaluated to determine whether they would meet the project's purpose as described above.

3.1 Summary of the Alternative Development Process

A range of alternatives to consider in this EIS was developed through the NEPA public and agency involvement process. Eight initial alternatives were developed during the scoping phase of the project. These initial alternatives were put through a two-step screening process to determine which alternatives would be carried forward for detailed study. The two steps used in the screening process are:

- **Level 1 Screening.** The initial alternatives were evaluated to determine how well they met the three elements of the project's purpose. The alternatives that did not meet all of the project's purpose were eliminated from further study. The alternatives that did meet all of the project's purpose were further evaluated with level 2 screening.
- **Level 2 Screening.** The alternatives that made it through level 1 screening were evaluated to determine their impacts to the community (such as relocations and Section 4(f) impacts) and their impacts to the natural environment (such as wetland impacts) so that the alternatives with the least amount of impacts would be carried forward for detailed study and the alternatives with the greatest impacts would be eliminated.

3.1.1 Development of the Initial Alternatives

Eight initial alternatives were developed during the project scoping process. These initial alternatives were developed with input from existing land use and transportation plans, the public, local cities, and resource agencies. The input was collected during public meetings, at alternative development workshops with the public and cities, and from comments that were submitted on the project Web site or mailed in (see Exhibit 3-1).

Exhibit 3-1: Initial Alternatives

Alternative	Description
No-Action	No improvements to S.R. 108 would be made under this alternative except for routine maintenance.
TSM (Transportation System Management)	This alternative consists of timing and coordinating traffic signals along S.R. 108 and adding left-turn and right-turn lanes at key intersections.
Transit Only	This alternative includes the TSM Alternative plus more-frequent bus service. The current bus service (Route 626) operates hourly and would be increased to high-frequency bus service that would operate every 15 minutes. Other modes of transit, such as commuter rail and light rail, were not considered prudent for S.R. 108 because they would not connect to other local or regional fixed-guideway transit such as the proposed commuter rail along I-15 about 3 miles east of S.R. 108. In addition, fixed-guideway transit on S.R. 108 is not compatible with the Utah Transit Authority's (UTA) or the Wasatch Front Regional Council's (WFRC) long-range plans for transit in the area. Bus service on S.R. 108 would connect to UTA's proposed commuter rail line along I-15 into Salt Lake City and would provide the necessary regional connectivity.
Three Lanes	This alternative consists of two travel lanes with a raised center median and dedicated turn lanes. The alternative includes left-turn and right-turn lanes at intersections, appropriate shoulders for local access, and pedestrian, bicycle, and transit facilities.
TSM, Transit Only, and Three Lanes	This alternative is a combination of the TSM, Transit Only, and Three-Lane Alternatives.
Five Lanes	This alternative consists of four travel lanes with a raised center median and dedicated turn lanes at intersections. The alternative includes left-turn and right-turn lanes at intersections, appropriate shoulders for local access, and pedestrian, bicycle, and transit facilities.
Seven Lanes	This alternative consists of six travel lanes with a raised center median and dedicated turn lanes at intersections. The alternative includes left-turn and right-turn lanes at intersections, appropriate shoulders for local access, and pedestrian, bicycle, and transit facilities.
Improve Other Area Roads	This alternative consists of widening 1000 West or 3000 West to five lanes and building the proposed North Legacy Parkway. No improvements to S.R. 108 would be made under this alternative.

3.1.2 Level 1 Screening

Level 1 screening was performed on the eight initial alternatives (see Exhibit 3-1: Initial Alternatives above). If an alternative did not meet all three elements of the project's purpose, it was not carried forward for detailed analysis. Alternatives that were considered and eliminated are described in Section 2.1, Alternative Development Process, of the Final EIS.

As shown in Exhibit 3-2, there is no initial alternative or combination of the initial alternatives, other than the Five-Lane Alternative, that would meet all of the project's purpose while avoiding the excessive impacts of the Seven-Lane Alternative. Therefore, only the Five-Lane Alternative was carried forward for level 2 screening.

Exhibit 3-2: Evaluation of Alternatives Considered

Purpose Element	Alternative							
	No-Action	TSM	Transit Only	Three Lanes	TSM, Transit Only, and Three Lanes	Five Lanes	Seven Lanes ^a	Improve Other Area Roads
Reduce roadway congestion on S.R. 108.	No	No	No	No	No	Yes	Yes	No
Eliminate the roadway deficiencies associated with a lack of shoulders and turn lanes in order to reduce accident rates on S.R. 108.	No	No	No	Yes	Yes	Yes	Yes	No
Enhance the opportunities for multi-modal use of S.R. 108 by providing improved bicycle, pedestrian, and transit facilities consistent with local and regional land use and transportation plans.	No	No	Yes	Yes	Yes	Yes	Yes	No

^a The Seven-Lane Alternative was determined to be unreasonable because it would have substantially more impacts to homes (due to relocations) and environmental resources.

3.1.3 Level 2 Screening

The purpose of level 2 screening was to further refine and develop the alternatives that met all of the project purpose elements in level 1 screening. For this project, the only alternative that passed the level 1 screening was the Five-Lane Alternative. The level 2 screening was conducted to ensure that the alternatives with the least amount of impacts to the communities and the natural environment would be carried forward for detailed study and that the alternatives with the greatest impacts would be eliminated.

Five different alignment alternatives were developed and evaluated in more detail to develop a range of reasonable alternatives to be considered in the EIS. The five alignment alternatives represent the different alignment variations that could

be implemented under the Five-Lane Alternative. Exhibit 3-3 below describes the five alternatives that were evaluated during level 2 screening.

Exhibit 3–3: Preliminary Five–Lane Alternatives

Alternative	Cross-Section Width	Description
Center Alignment	110 feet	Widen the roadway equally to the west and east.
Minimize 4(f) Impacts Alignment	110 feet	Widen the roadway both west and east to minimize Section 4(f) impacts.
Center Meander Alignment	110 feet	Widen the roadway both west and east to minimize overall property impacts, regardless of Section 4(f) status.
East Alignment	110 feet	Widen the roadway primarily to the east.
West Alignment	110 feet	Widen the roadway primarily to the west.

The five preliminary alternatives were evaluated against the screening criteria. The screening criteria included relocations, potential relocations, total property impacts, and impacts to Section 4(f) properties, farmland, and wetlands. Exhibit 3-4 provides a summary of the impacts from the preliminary five-lane alternatives.

Exhibit 3–4: Summary of Impacts from the Preliminary Five–Lane Alternatives

Alternative	Number of Relocations^a	Number of Potential Relocations^a	Number of Strip Takes	Total Property Impacts^b	Number of 4(f) Uses (Adverse)	Number of APAs Affected^c	Acres of Wetlands Lost
Center Alignment	31	133	299	463	27	4	0.025
Minimize 4(f) Impacts Alignment	61	47	246	354	14	4	0.025
Center Meander Alignment	42	93	244	379	25	4	0.025
East Alignment	147	42	87	276	33	2	0.039
West Alignment	108	57	167	332	22	2	0.025

^a Includes residential and commercial.

^b Includes relocations, potential relocations, and strip takes.

^c Agriculture Protection Areas (APAs) are geographic areas where agriculture activities are given special protections.

Exhibit 3-5 below summarizes the reasons why the Center, Center Meander, and East Alignments were eliminated from further study and why the Minimize 4(f) Impacts and West Alignments were carried forward for detailed study.

Based on the historic evaluation conducted on the homes along S.R. 108, the properties that were considered Section 4(f) properties have similar integrity and were considered to have equal value when determining which alternative to carry forward. Section 4(f) impacts were given the most consideration when determining which alternative to carry forward.

Exhibit 3-5: Level 2 Screening Results (Evaluate Community and Environmental Impacts)

Alternative	Level 2 Screening Results	Discussion
Center Alignment	Eliminated	<ul style="list-style-type: none"> • Third-highest number of combined direct relocations and potential relocations (164). • Highest number of total property impacts (463) when potential relocations and strip takes are included. • Second-highest number of adverse Section 4(f) uses (27). • Highest number of APAs affected (4). • Screening Result: Because it had the highest number of total property impacts and the second-highest number of adverse Section 4(f) uses, the Center Alignment was eliminated from further study.
Minimize 4(f) Impacts Alignment	Carried forward	<ul style="list-style-type: none"> • Fewest number of adverse Section 4(f) uses (14). • Lowest number of relocations and potential relocations (108). • Highest number of APAs affected (4). • Screening Result: Because it had the fewest number of adverse Section 4(f) uses along with the lowest number of relocations and potential relocations, the Minimize 4(f) Impacts Alignment was carried forward for detailed study.
Center Meander Alignment	Eliminated	<ul style="list-style-type: none"> • Second-lowest number of combined direct relocations and potential relocations (135). • Second-highest number of total property impacts (379). • Third-highest number of adverse Section 4(f) uses (25). • Highest number of APAs affected (4). • Screening Result: Based on the high number of adverse Section 4(f) uses and total property impacts, the Center Meander Alignment was eliminated from further study.

Exhibit 3–5: Level 2 Screening Results (Evaluate Community and Environmental Impacts)

Alternative	Level 2 Screening Results	Discussion
East Alignment	Eliminated	<ul style="list-style-type: none"> • Highest number of combined direct relocations and potential relocations (189). • Highest number of adverse Section 4(f) uses (33). • Would require relocation of Syracuse Elementary School, which would result in an impact to the community. • Highest number of wetlands impacts (0.039 acres). • Lowest number of APAs affected (2). • Screening Result: Based on the high number of relocations and potential relocations, adverse Section 4(f) uses, the relocation of the elementary school, and impacts to wetlands, the East Alignment was eliminated from further study.
West Alignment	Carried forward	<ul style="list-style-type: none"> • Second-lowest number of adverse Section 4(f) uses (22) and total property impacts (332). • Lowest number of APAs affected (2). • Would improve the level of service and safety by eliminating many access points along one side of S.R. 108, which would improve overall traffic operations and safety. • Screening Result: Because it had the second-lowest number of Section 4(f) impacts and total property impacts and because it would improve the level of service and safety, the West Alignment was carried forward for detailed study.

3.2 Alternatives Considered for Detailed Study

3.2.1 No-Action Alternative

NEPA requires an analysis of the No-Action Alternative. This alternative serves as a baseline for comparison and enables decision-makers to compare the environmental effects of the action alternatives. The No-Action Alternative assumed that no capacity improvements to S.R. 108 or adjacent transportation facilities would be made other than those improvements already identified in the WFRM Regional Transportation Plan to enhance mobility in the area. If no action is taken on S.R. 108, UDOT and the cities would likely continue to make minor maintenance improvements such as rehabilitating pavement and improving shoulders, turn lanes, sidewalks, and curb and gutter. Overall, the basic two-lane configuration of S.R. 108 would not change under the No-Action Alternative.

3.2.2 Minimize 4(f) Impacts Alternative (Environmentally Preferred and Selected Alternative)

The Minimize 4(f) Impacts Alternative involves widening S.R. 108 to a 110-foot, five-lane cross-section. In order to minimize the use of Section 4(f) properties, the alignment varies between the center alignment, west alignment, and east alignment. The main features of this alternative are:

- Five-lane (110-foot) cross-section consisting of four 12-foot travel lanes, a 14-foot median (either a two-way left-turn lane or a raised center median), 8-foot shoulders, 4-foot bicycle lanes, 2.5-foot curb and gutter, 4.5-foot park strips, 4-foot sidewalks, and 1 foot between the back of the sidewalk and the edge of the right-of-way.
- Although the exact location of raised medians would be determined during the final design of the project, raised medians between intersections would be considered in high-traffic areas such as commercial districts and schools to improve safety. Proposed medians between intersections to improve school safety would be at 1700 South mid-block for Syracuse Elementary and Syracuse Junior High Schools, at 700 South in Syracuse adjacent to the new high school, and at 550 North in West Point.
- Improve most intersections with dedicated right-turn and left-turn lanes. Dual left-turn lanes would be provided at 1700 South (southbound only), 1800 North, 5600 South, 4800 South, and 1900 West (eastbound only). Dual left-turn lanes were required at these high-traffic intersections to maintain a level of service of LOS D.
- Include an 8-foot shoulder width that will accommodate bus service.
- Support bicycle use along S.R. 108 by providing Class II bicycle lanes.

This alternative is identified as the environmentally preferred alternative because it would have the least amount of farmland impacts, the fewest impacts to historic properties, and the fewest residential and business relocations. In addition, the Selected Alternative would have the least amount of 4(f) uses.

3.2.3 West Alternative

The West Alternative also involves widening S.R. 108 to a 110-foot, five-lane cross-section. The centerline of this alignment is located such that the proposed right-of-way line along the east side of S.R. 108 matches the existing right-of-way line along the east side of S.R. 108. Due to this design, the alignment misses all properties on the east side of S.R. 108. Other design features would be the same as those described above for the Minimize 4(f) Impacts Alternative.

4.0 Section 4(f) (Chapter 5 of the Final EIS)

The FHWA Section 4(f) regulation (23 CFR 774) states:

The [FHWA] may not approve the use of Section 4(f) property unless (a) the Administration determines that: (1) there is no feasible and prudent avoidance alternative to the use of the land, and (2) the action includes all possible planning to minimize harm to the property resulting from such use; or (b) the Administration determines that the use of the property, including any measure(s) to minimize harm (such as any avoidance, minimization, mitigation, or enhancement measures) committed to by the applicant, will have a *de minimis* impact on the property.

Chapter 5, Section 4(f) Evaluation, of the Final EIS provides a detailed discussion of the Section 4(f) resources within the project study area, the impacts to these resources from the various alternatives, and approaches to avoiding and minimizing impacts to those resources.

The Selected Alternative will involve 4(f) uses of historic architectural properties only. No parks or other recreation areas or wildlife refuges will be used, and there are no Section 6(f) resources along S.R. 108.

4.1 *De Minimis* Findings

For a *de minimis* impact determination, FHWA must determine that the use of the property, including any measure(s) to minimize harm (such as any avoidance, minimization, mitigation, or enhancement measures) committed to by the applicant, will have a *de minimis* impact on the property. For historic sites, *de minimis* impact means that FHWA has determined, in accordance with 36 CFR 800, that no historic property will be affected by the project or that the project will have “no adverse effect” on the historic property in question.

Sixty-one architectural properties adjacent to S.R. 108 are eligible for the National Register of Historic Places (NRHP). Based on the 4(f) evaluation, the Selected Alternative will result in a 4(f) use of 54 architectural properties. Of these, 14 will be adversely affected, and there is no feasible or prudent alternative to the use of the land. The remaining 40 properties will have “no adverse effects” and are therefore considered *de minimis*. The Utah State Historic Preservation Office (SHPO) concurs with these findings.

4.2 Section 4(f) Use (Non-*De Minimis*)

FHWA determined that the Selected Alternative will use the remaining 14 historic architectural properties. FHWA has determined that there is no feasible

and prudent alternative to the uses of the land from these properties and sites and that the Selected Alternative includes all possible planning to minimize harm to these Section 4(f) properties. These findings are explained in Chapter 5, Section 4(f) Evaluation, of the Final EIS and are summarized below.

4.2.1 Consideration of Avoidance Alternatives

If the action alternatives would use the land from a 4(f) property, it is necessary to evaluate alignment alternatives that avoid these properties. Although the No-Action Alternative would not have any impacts to Section 4(f) properties, it does not meet the project's purpose and was not considered prudent and feasible. Total avoidance alternatives were considered for the Selected Alternative (Minimize 4(f) Impacts Alternative) and the West Alternative, including an off-corridor alignment.

Consideration of an Off-Corridor Avoidance Alternative

The feasibility of improving other north-south roads besides S.R. 108 was evaluated. During the S.R. 108 scoping process, several public comments suggested that improvements should be made to other north-south roads adjacent to S.R. 108 to reduce congestion and the need for improvements to S.R. 108. Some comments suggested that widening 1000 West and 3000 West would reduce the need for improvements to S.R. 108. In response to these comments, the Improve Other Area Roads Alternative was developed and evaluated in Chapter 2, Alternatives, of the Final EIS.

The Improve Other Area Roads Alternative would not meet the project's purpose and would result in a greater number of 4(f) impacts to architectural properties and parks than would improvements to S.R. 108. It was also determined that improving 1000 West and 3000 West would not be consistent with local or regional land-use and transportation plans or planned growth, would not eliminate roadway deficiencies, and would not improve multimodal use of S.R. 108. 1000 West and 3000 West would be used by less traffic than a similarly sized road such as S.R. 108, therefore increasing congestion on other roads. In addition, improving 1000 West or 3000 West would not provide regional connectivity. For these reasons, the Improve Other Area Roads Alternative was eliminated from further study. These reasons also prevent 1000 West or 3000 West from being used as an off-corridor avoidance alternative to avoid impacts to 4(f) properties along S.R. 108.

Consideration of a Reduced Roadway Cross-Section

Section 2.1.3.1, Development of the Preliminary Five-Lane Alternatives, of the Final EIS describes the evaluation of the 110-foot cross-section developed for the

action alternatives. The analysis concluded that reducing the cross-section to less than 110 feet would not allow the project to meet the purpose of eliminating roadway deficiencies associated with a lack of shoulders and turn lanes in order to reduce accident rates on S.R. 108. In addition, reducing the cross-section would not provide improved bicycle, pedestrian, and transit facilities. Finally, reducing the lane and shoulder widths would reduce the capacity of the road. With reduced shoulder and lane widths, the capacity of the Five-Lane Alternative would be reduced from 42,000 vehicles per day to 36,000 vehicles per day, which will result in a level of service of LOS F for three of the nine segments. This would not meet the local and regional mobility objectives in the screening criteria.

Consideration of a New In-Corridor Avoidance Alternative

The existing S.R. 108 alignment was used as a starting point for a new in-corridor avoidance alternative. Where the roadway was widened, any new pavement was placed adjacent to the existing pavement to avoid 4(f) resources. In addition, during the design process, the Selected Alternative alignment was shifted to avoid direct use (relocation) of architectural properties as much as possible and to limit constructive use of the properties. However, given the number of 4(f) resources on both sides of the road, at some locations it was not possible to completely avoid a resource. As discussed in Section 5.5, Avoidance Alternatives for Section 4(f) Properties, of the Final EIS, individual avoidance alternatives were developed for the architectural properties that will be used by the S.R. 108 project.

4.2.2 Least Overall Harm Analysis

This section discusses and compares the Minimize 4(f) Impacts and West Alternatives for each of the listed conditions in 23 CFR 774.3(2)(c). This regulation states, “If the analysis in paragraph (a)(1) of this section concludes that there is no feasible or prudent avoidance alternative, then the [FHWA] may approve only the alternative that causes the least overall harm in light of the statute’s preservation purpose. The least overall harm is determined by balancing the factors described in the headings below.

Ability to Mitigate Adverse Impacts to Each Section 4(f) Property.

For adverse impacts to historic properties, mitigation would be the same for both of the alternatives. Mitigation measures have been developed for the adversely affected historic resources in a Memorandum of Agreement with the SHPO.

A Memorandum of Agreement has been executed between FHWA, UDOT, and the SHPO. The Memorandum of Agreement stipulates that the adversely affected historic resources will be mitigated through the completion of an Intensive-Level Survey. The Minimize 4(f) Impacts and West Alternatives are similar in terms of their ability to mitigate the impacts to historic properties.

The Intensive-Level Survey includes the following elements:

- Photographs that show such attributes as the interior, exterior, and streetscape. This will include an adequate number of professional-quality, black-and-white photographs.
- Research material including a copy and a negative of the legal historic tax card (if available).
- All materials will be placed on file with the Division of State History, Historic Preservation Office.

The certified local government and historical societies and organizations in Roy and Syracuse did not identify any properties of particular importance to their communities. No similar organizations exist for Clinton, West Point, or West Haven, the three other communities along S.R. 108.

Severity of Remaining Harm after Mitigation to the Protected Activities, Attributes, or Features That Qualify Each Property for Section 4(f) Protection

The historic resources used (not *de minimis*) by both alternatives would be completely removed.

Significance of Each Section 4(f) Property

The official with jurisdiction over the historic properties is the Utah SHPO. The S.R. 108 team has met with the SHPO on numerous occasions throughout this project. FHWA and UDOT have prepared a DOE/FOE, which documented historic resources in the S.R. 108 study area. The DOE/FOE establishes the eligibility rating for each historic resource and the type of effect that each will receive from the alternatives. The SHPO has agreed to the DOE/FOE. The SHPO ratings for each historic resource are found in the DOE/FOE. As shown, the Minimize 4(f) Impacts Alternative would use two SHPO A-rated buildings and 12 SHPO B-rated buildings. The West Alternative would use four SHPO A-rated buildings and 18 SHPO B-rated buildings. Overall, the Minimize 4(f) Impacts Alternative would use two fewer historic A-rated resources considered by the SHPO to be of more importance.

In addition, the certified local government of Syracuse and the Roy Historical Museum did not identify any properties along S.R. 108 of particular importance.

Views of Officials with Jurisdiction over Each Section 4(f) Property

The official with jurisdiction over the historic properties is the Utah SHPO. The S.R. 108 team has met with the SHPO on numerous occasions throughout this project. FHWA and UDOT have prepared a DOE/FOE, which documented historic resources. The DOE/FOE establishes the eligibility rating for each historic resource and the type of effect that each will receive from the alternatives. The SHPO has agreed to the DOE/FOE.

In addition, the certified local government of Syracuse and the Roy Historical Museum did not identify any properties along S.R. 108 of particular importance.

Degree to Which Alternatives Meet the Project Purpose

The Minimize 4(f) Impacts Alternative and the West Alternative would meet the project purpose equally.

Magnitude of Adverse Impacts on Other Resources after Reasonable Mitigation

This section discusses other environmental resources that would be affected by the Minimize 4(f) Impacts Alternative and the West Alternative. For most resources, the impacts of the alternatives would be similar except for farmland, residential and business relocations, noise, and historic resources. The Minimize 4(f) Impacts Alternative would have slightly less impacts to farmland (1.8 acres) and fewer impacts to historic resources (8). The main difference between the

alternatives is the number of residential and business relocations. The West Alternative would cause 41 more residential relocations and six more business relocations. The greater number of residential relocations under the West Alternative would cause a greater disruption to the community by removing more families that have close connections to the community. Because the Minimize 4(f) Impacts Alternative would have fewer residential relocations it would have higher noise impacts than the West Alternative.

Substantial Differences in Costs among Alternatives

The Minimize 4(f) Impacts Alternative (\$178,100,000) would cost slightly less than the West Alternative (\$201,700,000).

Conclusion

Of the two action alternative considered (the Minimize 4(f) Impacts Alternative [Selected Alternative] and the West Alternative), the Selected Alternative will have eight fewer Section 4(f) uses, substantially fewer residential and business relocations, and a lower cost. The impacts to other resources would be similar between the alternatives. Given these greater impacts to Section 4(f) resources, the West Alternative was considered not a prudent alternative for avoiding or minimizing harm to the Section 4(f) resources used by the Selected Alternative. The Minimize 4(f) Impacts Alternative is the alternative that causes the least net overall harm.

4.2.3 Measures To Minimize Harm to Section 4(f) Properties

During the design process, design staff worked with the environmental resource specialist to initially avoid 4(f) properties by implementing alignment shifts, installing walls, and minimizing the construction limits.

A Memorandum of Agreement was executed among FHWA, UDOT, and the Utah SHPO. The Memorandum of Agreement stipulates that historic resources adversely affected will be mitigated through the completion of an Intensive-Level Survey. The Minimize 4(f) Impacts and West Alternatives are similar in terms of their ability to mitigate the impacts to historic properties. A copy of this Memorandum of Agreement is included in Appendix B, Determination of Eligibility and Finding of Effect and Native American Consultation, of the Final EIS.

The Intensive-Level Survey includes the following elements:

- Photographs that show such attributes as the interior, exterior, and streetscape. This will include an adequate number of professional-quality, black-and-white photographs.

- Research material including a copy and a negative of the legal historic tax card (if available).
- All materials will be placed on file with the Division of State History, Historic Preservation Office.

5.0 Measures To Minimize Harm from the Selected Alternative (Chapter 4 of the Final EIS)

As the Selected Alternative for this project was developed and reviewed through the NEPA process, the alignment underwent numerous changes to minimize adverse environmental impacts. Many potential impacts were eliminated or reduced by adjusting the alternative and/or avoiding sensitive resources. The remaining impacts associated with project construction and operation will be minimized by following the current UDOT standard specifications for road and bridge construction and implementing a variety of project-specific mitigation measures. The environmental impacts of the Selected Alternative were evaluated in a qualitative as well as a quantitative manner in Chapter 4, Environmental Consequences, of the Final EIS. Both beneficial and adverse impacts were evaluated and, where necessary, mitigation measures were developed.

FHWA will work closely with UDOT to ensure that all practical measures to avoid or minimize adverse impacts related to the Selected Alternative will be implemented. The following measures, which are described in detail in the referenced sections of the Final EIS, have been identified and are summarized in Appendix A, S.R. 108 Mitigation Commitments, of this Record of Decision.

Implementing the Selected Alternative will result in construction period (short-term) impacts and impacts associated with long-term operation of the project. FHWA has determined that the measures described below are appropriate to mitigate for the Selected Alternative and will be implemented. UDOT will administer implementation of all the mitigation measures described in the Final EIS, and FHWA will ensure that they are properly implemented via the monitoring and enforcement program discussed in this Record of Decision (see Section 6.0, Monitoring and Enforcement Program).

5.1 Farmland Impacts

The Selected Alternative will directly affect cropland as well as farmland that is under Agriculture Protection Area status. Some farmland is within the proposed right-of-way and will be directly taken out of production (direct impacts). No farmland outside the right-of-way will be affected (indirect impacts). It is expected that all farmland in the impact analysis area will be developed by the end of the study period (2035), even under the No-Action Alternative, due to the rapid development occurring in the area.

Mitigation Measures for Farmland Impacts. UDOT will work with each farm owner on a case-by-case basis to determine the farm's eligibility for benefits

under the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (URAA). Generally, UDOT will provide compensation for the expense of re-establishing farm enterprises and for fair market value of the buildings and land.

5.2 Community Impacts

Overall, the Selected Alternative will have no substantial direct or indirect effects on neighborhood and community cohesion, quality of life, recreation resources, or community facilities. The addition of raised medians could affect emergency vehicle response in some areas and will be coordinated with local emergency response providers. Three schools (Syracuse Elementary, Syracuse Junior High, and Syracuse High Schools) are located on S.R. 108. The Selected Alternative will add sidewalks and bicycle lanes to S.R. 108, so the safety of children who walk to school on S.R. 108 will be improved in those areas that currently have narrow sidewalks or no sidewalks. The final design could incorporate raised medians, which could serve as a place of refuge for pedestrians who cross a street mid-block or at an intersection. The safety of students will be considered during final design with additional coordination with the schools and will also be addressed during the construction period. The Selected Alternative will require the relocation of about 55 residential properties and the relocation of utilities that line the existing roadway.

Mitigation Measures for Public Health and Safety Impacts. If raised medians are incorporated into the final design, the sponsoring agencies will ensure that the locations of the medians will not interfere with emergency service providers' ability to respond to emergencies. Raised medians will also be placed near schools and busy commercial centers so that pedestrians have a relatively safe place to stop when crossing the road.

During the final design of the project, UDOT will coordinate modifications to the existing school crossing zones for Syracuse Elementary School, Syracuse Junior High School, and Syracuse High School with those schools to ensure that roadway improvements maintain student safety at those crossing locations.

During construction, equipment and excavations could pose a safety hazard for students who walk to school on S.R. 108. Before construction begins, the contractor will coordinate with the schools so that appropriate safety measures can be implemented. These measures could include avoiding construction during the morning and afternoon while students are walking to school and providing a safety monitor to watch students as they walk to school near the construction areas.

Mitigation Measures for Relocation Impacts. The loss of residences or businesses due to the Selected Alternative will be mitigated according to federal,

state, and local relocation policies. Assistance and re-establishment expenses will be provided to the displaced property owners and lease holders according to eligibility requirements and other requirements of the Uniform Relocation Assistance Act of 1970, as amended. Relocation resources will be available to each relocated resident and business without discrimination.

Mitigation Measures for Utility Impacts. The UDOT document Accommodation of Utilities and the Control and Protection of State Highway Rights-of-Way, Utah Administrative Code Rule 930-6, will be followed. The construction contractor will contact local businesses and residents if any loss of service is required during construction.

5.3 Economic Impacts

The Selected Alternative will result in the relocation of six businesses. Potential business impacts during construction are addressed in Section 5.11, Construction Impacts.

Mitigation Measures for Economic Impacts. Acquired businesses will be relocated by UDOT according to the Uniform Relocation Assistance Act, as amended; Title VI of the Civil Rights Act of 1964; and 49 CFR 24, Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs.

5.4 Air Quality Impacts and Transportation Conformity

The Selected Alternative will not result in any federal or state air quality standard being exceeded and will comply with the carbon monoxide (CO) and particulate matter (PM₁₀) emission budgets in the State Implementation Plan. However, several mitigation measures will be implemented to minimize PM₁₀-related emissions.

With the exception of ozone (O₃), the S.R. 108 project corridor meets the National Ambient Air Quality Standards (NAAQS) for all priority pollutants. The Wasatch Front region is currently in attainment for the new 8-hour ozone standard. Davis and Weber Counties have always conformed to past state requirements for ozone-related emissions. Projections indicate a steady decrease in mobile-source ozone-related emissions.

In accordance with Section 176(c) of the Clean Air Act (42 United States Code [U.S.C.] 7506[c]), transportation projects in non-attainment and maintenance areas must conform to the state air quality implementation plan. Conformance is demonstrated by meeting the criteria of the transportation conformity regulations (43 CFR 93). Project-level conformity determinations must be based on the latest

planning assumptions (40 CFR 93.112), the latest emission model (43 CFR 93.111), and consultation (40 CFR 93.112). The Final EIS has met these requirements.

The transportation conformity rule (40 CFR 93.114 and 93.115) requires that a currently conforming regional transportation plan and the transportation improvement program (TIP) must be in place at the time of project approval, and the project must come from the conforming plan and TIP. The WFRC 2007 Regional Transportation Plan and the 2007 TIP have been adopted and include the Selected Alternative.

The S.R. 108 project is in an attainment area for PM₁₀, so a project-level determination of whether the Selected Alternative will conform to the provisions of the Clean Air Act is not required. However, an analysis of CO and PM₁₀ was conducted in the Final EIS. The results of the CO and PM₁₀ analysis demonstrated that the Selected Alternative will not result in a violation of the NAAQS. Therefore, the project will not contribute to any new localized violations of the NAAQS nor will it increase the frequency or severity of any existing violations. Overall, the project has met all of the requirements of 40 CFR 93 and is found to conform.

Mitigation Measures for Air Quality Impacts. For PM₁₀, several mitigation measures will be implemented as part of the proposed project. These measures will include minimizing construction emissions through best management practices (BMPs) and maintaining construction equipment engines (see Section 5.11, Construction Impacts).

5.5 Noise Impacts

The Selected Alternative will increase existing noise levels by about 1 dBA (A-weighted decibels) to 2 dBA at most sensitive receptor locations throughout the corridor. A noise analysis was conducted according to UDOT's January 2008 noise policy (08A2-1) as part of the EIS process to determine if noise mitigation was reasonable and feasible at any sensitive receptor locations. Based on this analysis, it was determined that noise walls would be both reasonable and feasible at six locations as described below.

Mitigation Measures for Noise Impacts. Noise walls were considered for two mobile-home parks in Segment 8 of the project corridor and for townhomes adjacent to the alignment in Segment 9. Four noise walls were considered adjacent to Karol's Mobile Estates and the Country Meadows Estates, and two noise walls were considered adjacent to the townhomes in Segment 9. The results of the evaluation are summarized below.

Four noise walls were considered in Segment 8, and all four were considered feasible and reasonable. Residents who are adjacent to the proposed noise walls will be able to vote on whether they want the noise walls to be built. If residents are in favor of noise walls, they will be constructed.

- **Wall 1** (about 550 feet long) was located on the southeast side of Karol's Mobile Estates. A noise wall 16 feet high at this location would reduce noise by 4 dBA to 12 dBA at the majority of first-row residences and would be feasible and reasonable according to UDOT's noise-abatement criteria.
- **Wall 2** (about 300 feet long) was located on the northeast side of Karol's Mobile Estates. A noise wall between 12 feet and 18 feet high would reduce noise by up to 6 dBA at the majority of first-row residences. A noise wall in this location would be feasible and reasonable according to UDOT's noise-abatement criteria.
- **Wall 3** (about 400 feet long) was located on the south end of the Country Meadows Estates. A noise wall between 12 feet and 18 feet high would reduce noise by 9 dBA to 12 dBA at first-row residences and would be feasible and reasonable according to UDOT's noise-abatement criteria.
- **Wall 4** (about 425 feet long) was located on the north end of the Country Meadows Estates. A noise wall between 12 feet and 18 feet high would reduce noise by 7 dBA to 13 dBA at first-row residences and would be feasible and reasonable according to UDOT's noise-abatement criteria.

Two noise walls were considered in Segment 9, and both were considered feasible and reasonable. Residents who are adjacent to the proposed noise walls will be able to vote on whether they want the noise walls to be built. If residents are in favor of noise walls, they will be constructed.

- **Wall 5** (about 360 feet long) was located adjacent to the relatively new townhome development on the south side of the alignment. A noise wall 8 feet high at this location would reduce noise by about 5 dBA to 9 dBA at the majority of first-row residences and would be feasible and reasonable according to UDOT's noise-abatement criteria.
- **Wall 6** (about 950 feet long) was located on the south side of the alignment adjacent to the townhome development. Similar to Wall 5 described above, a noise wall 8 feet high would reduce noise by 6 dBA to 10 dBA at the majority of first-row residences. A noise wall in this location would be feasible and reasonable according to UDOT's noise-abatement criteria.

5.6 Water Quality Impacts

5.6.1 Surface Water

The Selected Alternative will not affect the beneficial use of any waters near or adjacent to S.R. 108 with the implementation of the water quality features identified below. The Selected Alternative could increase the amount of total dissolved solids (TDS) in receiving waters during project construction. However, the required Utah Pollutant Discharge Elimination System (UPDES) permit will include erosion-control measures such as silt fences that will reduce TDS impacts.

Mitigation Measures for Surface Water. Detention features will be provided where the capacity of the existing stormwater system is inadequate to convey the additional runoff flows or where the expected impact to the water quality of receiving waters requires flows to be detained and water treated. In addition to reducing peak levels and velocities in streams, detention ponds have the added benefit of reducing contaminant levels of total suspended solids (TSS), TDS, and the metals present in road runoff.

5.6.2 Groundwater Rights and Wells

The Selected Alternative will directly affect 34 water rights points of diversion.

Mitigation Measures for Impacts to Wells or Points of Diversion. During the final design of the project, UDOT will work with the property owner to determine the appropriate mitigation measure if a well head or other water right point of diversion is affected. Mitigation could include (1) relocating a well head or surface water diversion to continue to provide irrigation water to any land that is not acquired, or (2) abandoning the well and compensating the owner for the value of the associated water right.

5.7 Ecosystem Impacts

The Selected Alternative will affect only marginal wildlife habitat. These impacts will include the loss of some agricultural land (pasture and crops) and urbanized/disturbed land (roadways, residential, commercial, and landscaping). No threatened or endangered species are present along S.R. 108; therefore, no impacts will occur.

Under the Selected Alternative, 0.025 acre of the 0.36-acre wetland on the southwest corner of the S.R. 108/1900 West intersection will be affected. There will be no impact to the 0.05-acre wetland northeast of the Midland Drive/4800 South intersection along S.R. 108. Given that both wetlands are small and

isolated, their value to wildlife is likely minor. Some small agricultural-related ditches are adjacent to S.R. 108 and might drain to the Layton Canal and eventually to the Great Salt Lake, which is a water of the U.S., and therefore might be considered waters of the U.S. under the guidance of the U.S. Army Corps of Engineers (USACE). About 1 acre of these potentially jurisdictional ditches will be removed to accommodate the Selected Alternative.

Mitigation Measures for Ecosystem Impacts. A jurisdictional wetland determination report has been completed for the S.R. 108 project and submitted to USACE for review (Delineation of Waters of the U.S., S.R. 108 from S.R. 127 to S.R. 126, October 25, 2007, and Supplemental Delineation of Wetlands and Other Waters, S.R. 108 from S.R. 127 to S.R. 126, May 1, 2008). Prior to construction, USACE will determine the jurisdictional status of the drainage canals and isolated wetlands adjacent to S.R. 108. If the drainages are considered waters of the U.S. and the isolated wetlands are jurisdictional, then the appropriate Section 404 permit under the Clean Water Act will be obtained.

To mitigate any construction impacts to the small, isolated wetland, appropriate BMPs will be incorporated into the construction plan. Environmental fencing will be installed to prevent construction equipment impacts, and silt fencing will be installed to control sedimentation of the wetland. Any mitigation to the 0.025 acre of wetlands and the ditches parallel to the alignment will depend on the jurisdictional status and the type of permit requested as determined by USACE. However, no mitigation is anticipated for impacts to the ditches. Prior to construction, UDOT will coordinate with USACE and obtain all necessary permits and implement any required mitigation. No mitigation will be required for impacts to disturbed or urbanized land.

5.8 Historic, Archaeological, and Paleontological Impacts

The Selected Alternative will have a long-term adverse effect on 14 of the 61 architectural properties along S.R. 108 that are eligible for the National Register of Historic Places. This alternative will have no adverse effect on 40 of the 61 architectural resources.

Mitigation Measures for Historic Resources. Mitigation measures for adverse effects to historic buildings will be necessary for the Selected Alternative. The exact mitigation measures have been negotiated among FHWA, UDOT, the Utah SHPO, and interested parties through the Section 106 process of the National Historic Preservation Act. A Memorandum of Agreement has been executed between FHWA and the Utah SHPO (UDOT is an invited signatory) outlining the specific mitigation measures to be implemented for the Selected Alternative. The Memorandum of Agreement (see Chapter 14, Impacts to Historic,

Archaeological, and Paleontological Resources, and Appendix B, Determination of Eligibility and Finding of Effect and Native American Consultation, in the Final EIS) states that adverse impacts to historic properties will include a Utah State Intensive-Level Survey (ILS) in advance of construction activities. Submittals will include ILS forms and photographs according to SHPO standards.

In accordance with 36 CFR 800.13(b), UDOT and FHWA are providing for the protection, evaluation, and treatment of any historic property discovered prior to or during construction. UDOT Standard Specifications Section 01355, Part 1.13, Discovery of Historical, Archaeological, or Paleontological Objects, Features, Sites, Human Remains, or Migratory Avian Species, will be enforced during this project. This specification stipulates procedures to be followed if any archaeological, historic, or paleontological resources and/or human remains are discovered during construction of the project.

5.9 Hazardous Waste Sites Impacts

The Selected Alternative could affect about 10 potentially hazardous waste sites during construction. In addition, given the industrial and commercial land uses along parts of the existing road, there is the potential to encounter unknown hazardous waste sites.

Mitigation Measures for Hazardous Waste Sites. Measures will be implemented to prevent the spread of contamination and to limit worker exposure. Site investigations will determine the chemical hazard, if any, and the appropriate protective measures. In the case of an identified chemical hazard, the site remedy will be negotiated with the property owner prior to property acquisition and through the possible coordination with the Utah Division of Environmental Response and Remediation (DERR).

Previously unidentified sites or contamination could be encountered during construction. In such a case, all work will stop in the area of the contamination according to UDOT Standard Specifications, and the contractor will consult with UDOT and DERR to determine the appropriate remedial measures. Hazardous wastes will be handled according to UDOT Standard Specifications and the requirements and regulations of DERR.

At the time of construction, coordination will take place between UDOT and DERR, the construction contractor, and the appropriate property owners. This coordination will involve determining the status of the sites of concern, identifying newly created sites, identifying the nature and extent of remaining contamination (if any), and minimizing the risk to all parties involved. Environmental site assessments will be conducted at the sites of concern to

further evaluate the nature and extent of contamination and to better identify the potential risks of encountering hazardous waste when constructing the Selected Alternative.

5.10 Visual Impacts

The Selected Alternative will not substantially alter the general visual conditions along S.R. 108. Most changes will be due to the increased pavement width as the existing two-lane road is widened to five lanes. This change requires a larger right-of-way footprint (110 feet), which will bring S.R. 108 closer to buildings that currently line the roadway. It will also increase the visual dominance and scale of S.R. 108 as viewed from nearby locations, particularly residences, churches, businesses, and schools.

Mitigation Measures for Visual Resources. During the preliminary design of the project, several mitigation measures were considered to reduce the visual impacts of the alternatives. Additional aesthetic measures such as lighting, vegetation and plantings, and other architectural features will be considered during the final design of the Selected Alternative. Landscape plans for the roadway will include replacement landscaping to reduce impacts from the loss of vegetation.

5.11 Construction Impacts

Construction of the Selected Alternative will cause temporary construction-related impacts due to ground disturbance and the operation of construction equipment. Construction could also cause impacts to air quality, water quality, noise and vibration levels, light levels, visual resources, cultural resources, wildlife, vehicle flow (business operations), utility service, and hazardous material sites.

The nature and timing of these impacts will be related to the project's construction methods and phasing. As proposed, the improvements will be made as funding becomes available. Most construction-related impacts to the public will be associated with travel delays on local surface streets.

5.11.1 Mitigation Measures for Public Impacts due to Construction

A thorough public information program will be implemented to inform the public about construction activities and to minimize impacts. Information will include work hours and alternate routes. Construction signs will be used along the corridor to notify motorists about work activities and changes in traffic patterns.

Impacts from lights used during nighttime construction will be minimized by aiming construction lights directly at the work area and/or shielding the lights. Utility agreements will be completed to coordinate utility relocations.

5.11.2 Mitigation Measures for Air Quality Impacts due to Construction

The contractor will be required to provide the following mitigation measures to preserve air quality during construction:

- **Fugitive-Dust Control.** The contractor will maintain a fugitive-dust-control program. This program will include wetting excavation areas, unpaved parking and staging areas, and onsite stockpiles of debris, dirt, or dusty material to reduce windblown dust.
- **Street Sweeping.** The contractor will use street-sweeping equipment where needed.
- **Equipment Emissions.** The contractor will shut off construction equipment when it is not in direct use to reduce emissions from idling.

Other mitigation measures that could be implemented to minimize air quality impacts include the following:

- Use newer, cleaner-emitting construction equipment and properly maintain the equipment.
- Install control equipment on diesel construction equipment (such as particulate filters or traps, oxidizing soot filters, and oxidation catalysts) to the extent that is feasible.
- Reroute truck traffic away from schools and communities when reasonably practical.
- Consider the use of alternate engines and diesel fuels such as electric engines, engines that use liquefied or compressed natural gas, diesel engines that meet EPA 2007 regulations, diesel engines fueled with low-sulfur fuel, and diesel engines outfitted with catalyzed diesel particulate filters and fueled with low-sulfur fuel (less than 15 ppm sulfur).

5.11.3 Mitigation Measures for Water Quality Impacts due to Construction

To minimize the temporary impacts to water quality, a UPDES General Storm Water Discharge Permit will be required. As part of the requirements of the permit, the contractor will be required to develop and implement a Storm Water Pollution Prevention Plan. The plan will contain provisions for controlling the stormwater in the project area to reduce erosion and siltation.

5.11.4 Mitigation Measures for Noise Impacts due to Construction

To reduce temporary noise impacts associated with construction, the contractor will comply with all state and local regulations relating to construction noise. Measures for reducing construction noise include limiting construction in residential areas during nighttime hours, locating rock-crushing activities away from residential areas, and placing temporary barriers. Each construction area will be evaluated for the appropriate measures to use.

5.11.5 Mitigation Measures for Visual Impacts due to Construction

The contractor will prepare and implement an appropriate seeding vegetation and/or landscaping plan to restore or enhance aesthetics at the completion of the project. The contractor will also be required to maintain and keep the storage area for equipment, materials, and other accessories in a reasonable condition of cleanliness and orderly placement to avoid an unpleasant appearance. The contractor will promptly remove unused or unnecessary traffic-control equipment.

5.11.6 Mitigation Measures for Utility Service Impacts due to Construction

The project specifications will require the contractor to coordinate with the utility companies to plan work activities so that utility disruptions to a business occur when the business is closed or during off-peak times. Before beginning work, the contractor is required to contact Blue Stakes to identify the location of all utilities. The contractor will be required to use care when excavating to avoid unplanned utility disruptions. If utilities are unintentionally disrupted, UDOT will work with the contractor and the utility companies to restore service as quickly as possible.

5.11.7 Mitigation Measures for Traffic Impacts due to Construction

The contractor will be required to develop a maintenance of traffic plan that defines measures to minimize construction impacts on traffic. A general requirement of this plan is that, to the extent reasonably practical, safe access to businesses and residences must be maintained and existing roads must be kept open to traffic unless alternate routes are provided. However, prior to construction of each phase, the project team will coordinate with business and property owners to identify where temporary access can be shared and to define timeframes (such as night, for example) when access might not be needed. Signs will be placed to notify motorists where business access is provided. Finally, information will be made available to the public detailing construction activities and providing alternate transportation routes.

Even with the implementation of the maintenance of traffic plan, short-term increases in traffic congestion will occur in the vicinity of S.R. 108 construction. Street closures will be limited to what is specified in the maintenance of traffic plan as approved by UDOT before the start of construction.

5.11.8 Mitigation Measures for Economic Impacts due to Construction

Access to businesses will be maintained during the construction and post-construction phases of this project, as this is UDOT's policy with respect to access issues on all UDOT roadway improvement projects. For each phase of the project, the project team will coordinate with property owners and businesses to evaluate ways to maintain access while still allowing efficient construction operations. This could entail sharing temporary access or identifying acceptable timeframes when access might not be needed. Adequate signage will be placed in construction areas to direct motorists to businesses and industrial areas. Other potential mitigation measures for construction impacts include:

- Provide a frequent newsletter to all businesses along S.R. 108 describing the progress of the construction and upcoming construction events.
- Provide business access signs along S.R. 108 that identify business access points within the construction limits.
- Hold a monthly meeting with business owners to inform them of upcoming construction activities and to provide a forum for the businesses to express their concerns with the project.
- To minimize noise and light impacts at night, conduct major construction activities in residential areas during the day.

5.11.9 Mitigation Measures for Hazardous Materials Impacts due to Construction

To minimize the risk of exposure to hazardous materials, the UDOT project team will coordinate with DERR, the construction contractor, and the appropriate property owners. This coordination will involve determining the status of the sites of concern, identifying newly created sites, identifying the nature and extent of remaining contamination (if any), and minimizing the risk to all parties involved.

Measures will be implemented to prevent the spread of contamination and to limit worker exposure. Site investigations will determine the chemical hazard, if any, and the appropriate protection measures. In the case of an identified chemical hazard, the site remedy will be negotiated through coordination with DERR.

Previously unidentified sites or contamination could be encountered during construction. In such a case, all work will stop in the area of the contamination according to UDOT Standard Specifications, and the contractor will consult with UDOT and DERR to determine the appropriate remedial measures. Hazardous wastes will be handled according to UDOT Standard Specifications and the requirements and regulations of the Utah Department of Environmental Quality.

5.11.10 Mitigation Measures for Construction Staging and Material Borrow Areas

Earth-disturbing activities are generally confined to the limits of cut and fill, although staging areas and some construction activity might be located outside the limits of cut and fill. Any staging areas or construction fill material areas will need to be coordinated with UDOT to ensure that no sensitive environmental resources are affected. The contractor will limit impacts and restore any disturbed vegetation or other improvements within the selected staging areas. The contractor will need to comply with UDOT Standard Specification 01355 Section 1.12 (Environmental Protection, Environmental Clearances by the Contractor) regarding construction staging areas.

5.11.11 Mitigation Measures for Invasive Species Impacts due to Construction

To mitigate the possible introduction of invasive weeds due to construction activities, the invasive weed BMPs in UDOT's current Standard Specifications for Road and Bridge Construction will be implemented and monitored and included in the plans and specifications for the project.

- The contractor will be required to follow the noxious weed mitigation and control measures identified in UDOT Standard Specifications for Invasive Weed Control.
- Strictly following BMPs will also reduce the potential for weed infestations.
- Reseeding with native plants, followed by monitoring seedlings and invasive species until the vegetation has re-established, will mitigate direct-disturbance impacts and reduce the potential for weed invasions. UDOT will be responsible for monitoring and determining when vegetation becomes re-established.

5.12 Permits, Certifications, and Approvals (Chapter 4 of the Final EIS)

The permits and certifications required for the Selected Alternative include a Section 404 permit granted by USACE, a Section 401 Certification granted by the Utah Division of Water Quality, a Section 402 Permit (UPDES) granted by the Utah Division of Water Quality, an Air Quality Approval Order granted by the Utah Division of Air Quality, and a Water Rights Permit from the Utah Division of Water Resources. Additional permit requirements are discussed in Section 4.23, Permits and Clearances, of the Final EIS.

6.0 Monitoring and Enforcement Program

This Record of Decision represents a commitment to monitor and enforce the measures described above to minimize harm to the surrounding environment. All of the mitigation measures listed above and identified in the Final EIS will be incorporated into the contract(s), plan(s), and specifications and will be monitored according to the construction/post-construction monitoring plans. Enforcement of the contract provisions and monitoring of the project is the responsibility of the selected UDOT Project Manager.

7.0 Statute of Limitations

FHWA will publish a notice in the Federal Register, pursuant to 23 U.S.C. 139(1), indicating that one or more federal agencies have taken final action on permits, licenses, or approvals for this transportation project. After the notice is published, claims seeking judicial review of those federal agency actions will be barred unless such claims are filed within 180 days after the publication date of the notice, or within such shorter time period as is specified in the federal laws pursuant to which judicial review of the federal action is allowed.

8.0 Final EIS Comments and Responses

Notice of release of the Final EIS was published in the Federal Register on September 5, 2008, and the end of the wait period was October 6, 2008. The Final EIS was distributed to federal, state, regional, and local agencies as well as the public. In addition, copies were placed in local libraries for review by the general public. A notice of availability of the Final EIS was placed in local and regional newspapers and on the project's Web site.

Exhibit 8-1 below lists the agency and public comments provided on the Final EIS during the 31-day wait period along with FHWA's responses.

Exhibit 8-1: S.R. 108 Final EIS Response to Comments

Commenter	Comment	Response
Kate Johnson, Environmental Program Manager, Utah Division of Drinking Water	I appreciate the opportunity to review the EIS for the S.R. 108 project. As you can see from the attached map, there are numerous public drinking water sources and associated protection zones in the area of this project, and we would ask that due consideration be given to coordinating any activities that could be to the detriment of these water supplies with the adjacent cities. Thank you.	Section 3.11.3.2, Groundwater Rights, of the Final EIS describes and shows proposed wells along S.R. 108. The project team reviewed the map that was provided with the comment against the data in the Final EIS, and all of the water sources and associated protection zones along the project were included in the analysis. The Selected Alternative is located about 478 feet east of and up-gradient of the Hooper Water Improvement District's Well #1 and outside of drinking water protection Zone 1 for this well (a 150-foot radius around the well head). No other drinking water wells are within about 0.25 mile of the Selected Alternative or are down-gradient of the alternative. In addition, the source of drinking water in these wells is the deep aquifer, which would not be affected by runoff from the Selected Alternative. UDOT has coordinated on the location of the roadway with the cities along S.R. 108 regarding potential impacts to drinking water infrastructure and will continue the dialogue as the project moves forward.
Russell Kofoed	One question: with the reduced scope will you still need to buy any houses in the Syracuse area? I don't live on 2000 [West] but will be asked by those that do.	This Record of Decision approves the full build-out of the Selected Alternative as evaluated in the Final EIS. However, because funding is not yet available to construct the complete project, UDOT will make interim improvements within the scope of the Final EIS to improve safety and reduce congestion as current funding allows. Currently, UDOT anticipates that the interim improvements will include widening the existing two-lane road to three lanes and making intersection improvements such as adding right-turn lanes. UDOT anticipates that the full project will be completed as described in this Record of Decision well before 2035. Under the interim improvements, UDOT does not plan to take homes along the roadway, although narrow strips of property could be purchased.
Jan M. Zogmaister, Weber County Commissioner	I appreciate the update. With the funding reduction, I am not in support of continuing the five-lane plan and going to 800 North due to the fact that this will not provide any relief for the Weber County section of S.R. 108 for many years. The congestion does not stop in Davis County. I strongly support UDOT in the plan for the continuous center left lane and right-turn lanes for the entire length of the S.R. 108 project. This is the only way Weber County will receive any relief within an acceptable amount of time.	Thank you for your comment. UDOT's interim project will look at providing three lanes for the entire project length and making intersection improvements.

Commenter	Comment	Response
James Brinkerhoff	<p>So where will the three lanes be? Will they follow the existing road or will they be in the center area of the contemplated road?</p> <p>It looks like the reduction in scope will be the best for everybody except those that live on the road. When this three lanes with left-turn lanes has been around for 8 to 10 years, you can be sure that the property will be worth a whole lot less than it is now. So I say take it from where Clinton left it, make it the same size as the Clinton addition, and go both ways until you run out of money. Like do it right the first time.</p> <p>If UDOT changes its mind now, when can we ever be sure what they will do next? Do we get to go over their decision in a meeting now?</p>	<p>UDOT anticipates the initial build to be three lanes consisting of two travel lanes and a center turn lane. UDOT will try to keep the project impacts within the existing right-of-way to limit property impacts. Therefore, the improvements will be in the center of the existing road for most of the project.</p> <p>At this time, UDOT does not plan to have another meeting as part of the environmental process.</p>
Greg Moffitt	<p>I hope this reaches the right person or people for the widening of S.R. 108. As a man in his fifties, I would like to see sidewalks utilized on both sides of the street as well the installation of bike lanes as I'm now enjoying the habit of riding. Thanks for listening.</p>	<p>This Record of Decision approves the full build-out of the Selected Alternative as evaluated in the Final EIS. However, because funding is not yet available to construct the complete project, UDOT will make interim improvements within the scope of the Final EIS to improve safety and reduce congestion as current funding allows. Currently, UDOT anticipates that the interim improvements will include widening the existing two-lane road to three lanes and making intersection improvements such as adding right-turn lanes. UDOT anticipates that the full project, which will include sidewalks and bicycle lanes, will be completed as described in this Record of Decision well before 2035. Under the interim improvements, no sidewalk improvements would be made. However, in some locations, the shoulders would be slightly wider to better accommodate bicyclists.</p>
Michael Andreassen	<p>I live adjacent to S.R. 108 in Syracuse on 1175 South. I was told yesterday (Sunday) that a decision has been made that the homes on the west side through the Syracuse corridor would not be taken out to widen the road. I was also informed the road would only be widened to accommodate a left-hand turn lane in each direction, a right-hand turn lane in each direction along with the regular traffic lane in each direction. Can you comment on these new developments? It would be greatly appreciated.</p>	<p>This Record of Decision approves the full build-out of the Selected Alternative as evaluated in the Final EIS. However, because funding is not yet available to construct the complete project, UDOT will make interim improvements within the scope of the Final EIS to improve safety and reduce congestion as current funding allows. Currently, UDOT anticipates that the interim improvements will include widening the existing two-lane road to three lanes and making intersection improvements such as adding right-turn lanes. UDOT anticipates that the full project will be completed as described in this Record of Decision well before 2035.</p>
Robert Freeman	<p>Does a three-lane road include parking, gutter, and sidewalk similar to the new Clinton improvements? And, if so, how can this be done without additional right-of-way acquisition?</p>	<p>The interim build of three lanes does not include sidewalks, curb, and gutter, although short, isolated sections of sidewalk or curb and gutter might be replaced. The roadway widening will focus on providing a center turn lane for the entire corridor, and right-turn lanes will also be</p>

Commenter	Comment	Response
		added where needed. To accommodate these improvements, narrow strips of property might need to be purchased.

Commenter	Comment	Response
Brody Crosson	So does that mean they are going to go ahead with the Antelope [Drive] to 800 North thing and the remaining 6.5 miles just add a turn lane, or just add a turn lane the whole way?	This Record of Decision approves the full build-out of the Selected Alternative as evaluated in the Final EIS. However, because funding is not yet available to construct the complete project, UDOT will make interim improvements within the scope of the Final EIS to improve safety and reduce congestion as current funding allows. The interim plan is for three lanes for the entire corridor (one travel lane in each direction and a center turn lane where one does not currently exist). Right-turn lanes will also be added where needed. The full build-out between Antelope Drive and 800 North will be done in the future when funding becomes available.
Lee Stone	I have reviewed the proposed routing of S.R. 108 through my area of Syracuse and find it to be very distressing. First off, there is not room for the proposed five lanes + bicycle lanes + park strips and maintain[ing] the lifestyle of the community. Second, the vast majority of the area to be taken is from the west-side properties (of which I'm one) and leaves no room to even park in my driveway. Parking problems aside, you are destroying any value my property may have and any possibility of selling it in the future. Third, you have overestimated the growth that will occur in the area. I have been here for 20 years and have seen tremendous growth but am unconvinced that the level of growth will continue even if the economy improves. The alternative of TSM, Transit Only, and Three Lanes should suffice for this thoroughfare. Making it larger encourages higher use by individuals who could well use alternative routes to distribute the congestion. Fourth, by making the 2000 West road so large you encourage speeding through that area, making it less safe (not more) for pedestrians and students at the elementary and high schools in that area. You are turning it into a highway. My preference then would be the Three Lane, TSM, Transit Only alternative out of the choices you've outlined.	This Record of Decision approves the full build-out of the Selected Alternative as evaluated in the Final EIS. Section 4.3.2.2, Quality of Life, in the EIS analyzed changes to the community from the proposed project. Based on public input and community surveys, the majority of residents felt that the project would not substantially alter the quality of life in the area. If your property is affected by the project, UDOT must follow a step-by-step process. Property acquisitions, both partial and total, will be made according to federal guidelines and UDOT policies that include fair compensation measures for property owners. The growth numbers used in the EIS process were developed by the Governor's Office of Planning and Budget and are the official population and household projections used in planning efforts. These growth numbers are reviewed by the cities before being approved. The alternative of TSM, Transit Only, and Three Lanes was considered in the EIS. However, the alternative was eliminated from detailed consideration because it would not meet the project screening criterion of providing a level of service of LOS D on S.R. 108 in 2035.
Wade Draper	My warranty deed does not have any road or easements of right-of-way on it. I understand there is a document from way back in 1894 which did say the road would be opened to 4 rods wide and maintained. This roadway was never opened to 4 rods wide or maintained to 4 rods wide. The road right-of-way is only as wide as the road is today. None of your impact statements have addressed this that I am aware of. Please address this for me. How many more people['s] warranty deeds are like mine? When can I expect to have someone contact me to buy enough ground so UDOT can widen the road to three lanes wide in front of my place?	The existing right-of-way width near your home is 66 feet, or 4 rods. As you have pointed out, this width was established long ago in anticipation of needing a wider road in the future. This is very common throughout the state and was done to minimize impacts to homes when future expansion was needed. The EIS has determined that there is a need to widen the road to a five-lane cross-section. However, due to lack of funding, this expansion is presently limited to a three-lane cross-section, meaning one travel lane in each direction with a center turn lane. By providing the center turn lane now, UDOT can significantly reduce congestion and increase safety until enough

Commenter	Comment	Response
		<p>funding is provided for the full build-out, which could be several years. UDOT does not anticipate needing to purchase right-of-way to add this center turn lane. However, as the design progresses over the next few months, if UDOT finds that some strips of right-of-way are needed, they will contact the property owners at that time.</p>

Commenter	Comment	Response
John Wallace	<p>My name is John D. Wallace, and I own the home at 4552 Midland Dr. Personal circumstances require that we sell the home at this time, and we put the home on the market Aug 1. We have had two offers, both of which backed out because I was unable to tell them exactly what is going to happen in front of our home. The problem is that Midland Dr. is some 2 feet higher in elevation than my garage floor, and I don't understand how you can widen Midland Dr. towards my house (south) without lowering the elevation of Midland; otherwise, the grade drop onto my driveway would be extreme. I have attended two of your public meetings during the last year or so, and your engineers were unable to answer my question. Can you help me out here?? We have already moved and I must sell our very desirable home. You can e-mail me at johnw@networld.com, or call at (801) 731-6265, or of course mail 4552 Midland Dr., Roy, UT 84067-9506. I hope to hear from you soon. Thank you.</p>	<p>After the Record of Decision is approved, UDOT will start the final design process. During this process, UDOT will determine how the proposed improvements will tie into existing access points along S.R. 108. The preliminary design at this location shows that the driveway could be graded to a 5% slope, which meets applicable standards. During the final design process, this profile of the road will be optimized to best fit the surrounding development.</p>
Greg Moffitt	<p>I live at 3750 Midland Dr. in County Meadows mobile-home park. It is difficult to turn into the park coming from the north and I'm sure that a continuous left-turn lane will help greatly. My question is this: will there be a middle or merging lane turning out of County Meadows heading south on S.R. 108 in the three-lane configuration?</p>	<p>The project includes a center turn lane that can be used for left turns into the mobile home park or for merging into traffic when turning out of the mobile-home park.</p>
Lorraine Barber	<p>I reside at 734 North 2000 West in West Point... I have been patient as all of the road studies have been completed and we have been pleased with the results even though we will lose our home of 25 years. However I am very frustrated that now that the road plans and study have finally been completed and approved, you are hesitating to follow through. We have put off so many upgrades to our home or put them on hold knowing that the house would be torn down, and then out of concern of money for the whole project, you are considering the center lane option. I wait in my driveway for up to 8 minutes in the afternoon as traffic rolls north to Clinton. I wait in the morning for 5-8 minutes to go south from my house. Yet few are turning off the road, and they are all heading somewhere. We feel that it is time to move forward with the plan. Purchase our houses so we can move forward in our lives and the traffic can flow as needed. If you can only complete to 800 North, then do that much and begin the money requests for the next section. The work on the roads in Clinton could help to make it through until more funding is found. We realize times are changing and improvement is needed.</p>	<p>The EIS was based on an S.R. 108 transportation solution for the year 2035. Based on expected travel demand, the road will need to be five lanes as identified in the EIS. Unfortunately, the funding approved by the Utah Transportation Commission (\$70 million) for the project isn't enough to widen the corridor to five lanes (about \$178 million). Due to the lack of funding, the initial improvement will likely be limited to a three-lane cross-section for the entire project length, meaning one travel lane in each direction with a center turn lane. By providing the center turn lane now, UDOT can significantly reduce congestion and increase safety until enough funding is provided for the full build-out, which could be several years. This approach uses the current funding to provide immediate congestion relief and safety improvements to the entire corridor. UDOT did consider making the five-lane improvement one section at a time but determined that this could increase congestion on the sections that are not yet improved. Based on an evaluation of traffic, UDOT determined that an initial three-lane road for the entire project length would acceptably reduce congestion. UDOT will try to keep the impacts of the initial three-lane project within the existing right-of-</p>

Commenter	Comment	Response
	We have already gotten over that. We are ready to move on and ask that you please consider moving forward section by section to complete this project and make things better for the residents and the traffic.	way in order to limit property impacts.

Commenter	Comment	Response
Nancy Gehring	We are interested in an early acquisition of our property and would appreciate notification or information to achieve this. Concerning the four-lane approach, when will a map or information be available on specific impacts on our property?	<p>This Record of Decision approves the full build-out of the Selected Alternative as evaluated in the Final EIS. However, because funding is not yet available to construct the complete project, UDOT will make interim improvements within the scope of the Final EIS to improve safety and reduce congestion as current funding allows. Currently, UDOT anticipates that the interim improvements will include widening the existing two-lane road to three lanes and making intersection improvements such as adding right-turn lanes. UDOT anticipates that the full project will be completed as described in this Record of Decision well before 2035.</p> <p>Under the interim improvements, UDOT does not plan to take homes along the roadway, although narrow strips of property could be purchased. As the design progresses over the next few months, if UDOT finds that some strips of right-of-way are needed, they will contact the property owners at that time.</p>
Clysta Day	One question I have: is the latest that they are going to put in the turn lanes then?	<p>This Record of Decision approves the full build-out of the Selected Alternative as evaluated in the Final EIS. However, because funding is not yet available to construct the complete project, UDOT will make interim improvements within the scope of the Final EIS to improve safety and reduce congestion as current funding allows. Currently, UDOT anticipates that the interim improvements will include widening the existing two-lane road to three lanes and making intersection improvements such as adding right-turn lanes. UDOT anticipates that the full project will be completed as described in this Record of Decision well before 2035.</p>
Larry G. Moore, Ray Quinney & Nebeker	<p>As I indicated in my telephone message, our firm represents the related owners (Crouch Family Investments LC, Bruce A. Crouch, Triple Stop) of the 13 contiguous parcels of commercial property on the northwest corner of 3500 West and 4800 South in Roy, Utah. The property closest to the intersection is operated as an integrated and complementary convenience store with gasoline pumps and related automatic and self-serve car washes. The proposed widening of the subject road would take away not only critical access points for these properties but the ability to sell gas, which in turn makes the convenience store and related car washes successful. By taking the property used for gasoline sales and access, the severance damages will be very substantial in that very few convenience stores can operate successfully without the ability to sell gas. In addition, a substantial portion of the car wash business derives from customers</p>	<p>UDOT has reviewed your comments and concerns regarding the Crouch Family Investments and the impacts the proposed S.R. 108 Selected Alternative would have on the property.</p> <p>Please note that, since funding is not yet available to construct the complete five-lane project, UDOT will make interim improvements, a process that is within the scope of the Final EIS. These improvements are designed to enhance safety and reduce congestion as current funding allows. The interim plan includes widening the existing two-lane road to three lanes (one travel lane in each direction with a continuous center turn lane) and making intersection improvements such as adding right-turn lanes. The interim improvements should have minor impacts to the property, and most of the improvements are expected to be constructed within UDOT's existing right-of-way. UDOT does not plan to purchase any parcels as part of the interim project.</p>

Commenter	Comment	Response
	<p>who have purchased gasoline.</p> <p>Both alternatives of the proposed widening and realignment of State Road 108 (Midland Drive) will severely impact our client's properties. In particular, they eliminate the east fueling canopies, drive-thru access, and access curb cuts for the convenience store as well as taking much of the car lot property and related access points.</p> <p>Not only will our client be damaged by the loss of the value of the specific property taken and the loss of access points, because of the loss of the fueling canopies and access drives for the Triple Stop, it is doubtful that property could continue to function in a profitable manner, since the sale of gasoline is critical to the success of the convenience store business and to the car wash. In other words, our client will suffer substantial "severance" damages and lost revenues from its businesses if UDOT proceeds with either of the planned alternatives. Our client has received written offers to purchase just the convenience store property for amounts in excess of \$1,400,000. With regard to the first offer, as soon as the prospective buyer discovered the potential widening of this road and the attendant loss of property, the offer was withdrawn. Our client is reluctant to pursue the second or any other offers until we are able to definitively ascertain the impact of realignment on this property.</p> <p>We hereby request a meeting with you at UDOT to discuss the road widening at this critical intersection and to consider other avenues for the widening of this road. We are available to meet almost any day at any time. Please call me at your earliest convenience to set a meeting time. We also want to make sure that UDOT is fully aware of the substantial direct, consequential, and severance damages that our clients will suffer from the taking by UDOT.</p> <p>As indicated previously, our client has spent a lifetime building successful businesses at this intersection which have a synergy with each other. UDOT's proposed plans will severely damage those business interests, far beyond the value of the property actually taken.</p>	<p>FHWA has approved the five-lane cross-section evaluated in the Final EIS. This five-lane cross-section could be built sometime in the future when or if funds become available, and the five-lane cross-section ultimately would require right-of-way acquisition as shown in the Selected Alternative preliminary drawings. As part of the overall EIS process, UDOT presented and discussed the impacts of the Selected Alternative with property owners during several public meetings and explained the design for the proposed alignment through the 3500 West and 4800 South intersection in Roy. Provided below are more details about why a five-lane alternative was selected and how the design was developed through the intersection.</p> <p>A range of alternatives to consider in the EIS was developed through the National Environmental Policy Act (NEPA) public and agency involvement process. Eight initial alternatives were developed during the scoping phase of the project. These alternatives included taking no action as well as various action alternatives including transit only; transportation system management; three lanes; a combination of transit only, transportation system management, and three lanes; five lanes; seven lanes; and improving other roads. These initial alternatives were put through a two-step screening process to determine which alternatives would be carried forward for detailed study. Level 1 screening was performed on the eight initial alternatives. If an alternative did not meet all three elements of the project's purpose, it was not carried forward for detailed analysis. Alternatives that were considered and eliminated are described in Section 2.1, Alternative Development Process, of the Final EIS. There was no initial alternative or combination of the initial alternatives, other than the Five-Lane Alternative, that would meet all of the project's purpose while avoiding the excessive impacts of the Seven-Lane Alternative. Therefore, only the Five-Lane Alternative was carried forward for detailed study.</p> <p>UDOT will continue to coordinate with property owners during the final design phase regarding impacts to their property and will look at potential design changes to reduce impacts within the scope of analysis in the Final EIS.</p>
Reed Grundy	<p>I live very near Hwy 108 and have the following comments: I was on the citizen advisory group. My complaints are these: it took forever to complete, seems there are too many projects going on at one time and not enough people and \$ to go around. UDOT should consider less going on at one time and devote more to each project to</p>	<p>The recent improvements mentioned in the comment are part of an S.R. 108 project implemented by the City of Clinton and not the S.R. 108 project being considered by UDOT and FHWA and evaluated in the EIS. This project would consist of widening S.R. 108 to five lanes and would include sidewalks, curb, and gutter. However, because</p>

Commenter	Comment	Response
	<p>complete them in a timely manner.</p> <p>From the initial meeting with all of the photos of the entire highway, I assumed there was to be [a] wider, curbed and guttered roadway from one end to the other. That has not happened. It is also left too narrow in several places. Also the curb and gutter ends [at] approximately 1100 North and leaves an area on the east side that you continue to patch when it is dry but no one sees it when it rains or snows. It becomes a large puddle that everyone tries to dodge and causes a traffic hazard. This needs to be fixed before you can consider the project complete. It is on the east side about halfway between the corner of 800 North. The dirt to the east of it is much higher so the water flows to the low spot and accumulates there. I would be happy to point this area of problem out to one of your people at any time you have someone in the area.</p>	<p>funding is not yet available to construct the complete project, UDOT will make interim improvements within the scope of the Final EIS to improve safety and reduce congestion as current funding allows. Currently, UDOT anticipates that the interim improvements will include widening the existing two-lane road to three lanes and making intersection improvements such as adding right-turn lanes.</p>
Steve and Belinda Nebeker	<p>This is about the S.R. 108 [project] and we are one of them who will be losing our home. We have been dealing with this for the past four or five years, and now you are telling us that we have to wait another eight to ten years. In addition, you are going to put us through making this a three lane. I feel that when it goes to three lanes we will lose part of our front yard and that will destroy our property value. You cannot say it will not hurt the value of our house. Then we will have to suffer through all of the construction and have to deal with all of that. You say 70 million dollars will not make it to 800 North but you have 90 million dollars [20 million dollars left from the Antelope [Drive] project] and you could go to at least 800 North if not all the way to 1300 North.</p> <p>All I want you to do is buy my house so I can move on with my life. I tried for the early buy-out but I did not qualify because I do not have a health problem or a child that has a health problem or handicapped and we don't have a job that requires a relocation. All I have is mental stress from being in limbo, that you may not consider as a major health problem but it is affecting my family and me. What I really hate the most is that when I first heard about the S.R. 108 project I was extremely mad, saying I will never let them take my house. Then I was okay with it and excited about moving on with my life. Now that you are saying I will have to wait another eight or ten years I am back to being mad. When I don't want you to take my house you say you're going to take it, and now that I want out you are saying I am stuck here for another eight to ten years.</p> <p>I think you should buy out all the houses that you planned on taking and then rent them out to make more money for future projects or</p>	<p>The EIS was based on an S.R. 108 transportation solution for the year 2035. Based on expected travel demand, the road will need to be five lanes as identified in the EIS. Unfortunately, the funding approved by the Utah Transportation Commission (\$70 million) for the project isn't enough to widen the corridor to five lanes (about \$178 million).</p> <p>Due to the lack of funding, the initial improvement will likely be limited to a three-lane cross-section for the entire project length, meaning one travel lane in each direction with a center turn lane. By providing the center turn lane now, UDOT can significantly reduce congestion and increase safety until enough funding is provided for the full build-out, which could be several years.</p> <p>An important change to be aware of is that UDOT does not plan to buy any houses for the three-lane plan. UDOT expects that most of the work can be done within the existing right-of-way. However, as the design progresses over the next few months, if UDOT finds that some strips of right-of-way are needed, they will contact the property owners at that time. We do not anticipate that UDOT will need to do early acquisition of homes for the interim (three-lane) improvements.</p>

Commenter	Comment	Response
	<p>rent them to lower-income families that are struggling financially or families that face the risk of foreclosure. On the other hand, you could take our house off the books so we can put it up for sale and move if we choose to. However, if you plan on leaving us in limbo for the next decade, that is just wrong.</p> <p>I would also like to know how it is cost-effective to have the power company move all the power poles to make S.R. 108 a three-lane road and then move them again to make it a five-lane highway?</p> <p>That is just a waste of time and money to make them do it twice. Why did I receive an e-mail from Darla's office that said they are still on track to obtain properties and start the road construction in the fall of 2009? Going to a three-lane highway is not going to help with the traffic on this road; there are more and more people using this road to commute. This area is growing rapidly, and a three-lane highway will not be suitable for traffic that S.R. 108 has received in the past three years. There are several places that you have already wasted money. The new Syracuse High School is going to move the sidewalk and grass patch to make room for the five-lane road. Then there is the area by the Clinton Wal-Mart where they widened the road but they could have taken it to the full five lanes from the beginning and saved millions of our tax dollars.</p> <p>Twenty years ago, I had to get approval from the State to put gravel in the front of my house. Why can't you make these people do the job right the first time? After all, you are the STATE! If you say they are the City and you don't control them, then how is it that you can say let's make it a three-lane road, when West Point City has a law on the books that says if you live on a main road you must have 40 feet from the front of your house to the start of the road? If you go to a three-lane road, I will not have 40 feet between my house and the road. I would like to know, if it does go to a three-lane road, what side of the road would you obtain property from, the east or west?</p> <p>I would like to know what I could do to have the State of Utah buy me out of my house. Therefore, I can move along with my life and not have to deal with this mental stress from being in limbo.</p>	
<p>Larry Svoboda, U.S. Environmental Protection Agency</p>	<p>EPA has reviewed your responses to our DEIS comments and we are generally satisfied that our concerns regarding impacts from construction emissions on sensitive receptors such as schools and nursing homes in the area have been addressed. The responses also adequately address comments regarding air and water quality impacts. However, please note that EPA and FHWA have been</p>	<p>Thank you for the comment. FHWA will continue to work with EPA regarding language for Mobile Source Air Toxic risks, impacts , and mitigation measures to include in future EISs.</p>

Commenter	Comment	Response
	negotiating language for Mobile Source Air Toxic risks, impacts, and mitigation measures for some time and there is not yet agreed-upon language for inclusion in this FEIS.	

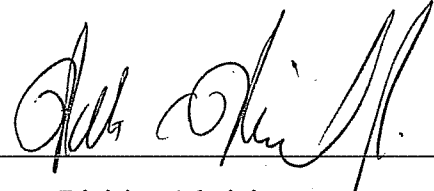
9.0 Conclusion

FHWA has determined that the Selected Alternative (the Minimize 4(f) Impacts Alternative) best meets the transportation needs for the traveling public while effectively considering environmental, safety, and socioeconomic factors. This decision is based on the Final EIS and the entire project record.

In reaching our decision, FHWA has considered all of the issues raised in the record including the information contained in (and comments to) the Draft and Final EISs. The Selected Alternative was developed through a public process that included project adjustments to avoid and minimize environmental impacts.

FHWA consulted with other federal and state agencies including the U.S. Fish and Wildlife Service, the U.S. Environmental Protection Agency, the U.S. Army Corps of Engineers, the Utah Department of Environmental Quality, the Utah Department of Natural Resources, the Utah Division of Wildlife Resources, the Utah State Historic Preservation Office, the Advisory Council on Historic Preservation, and Native American tribes. A full list of interagency coordination is included in the Final EIS.

Based on the analysis and evaluation in the Final EIS and after careful consideration of the social, economic, and environmental factors and input from the public involvement process, FHWA approves the selection of the Minimize 4(f) Impacts Alternative for the project.

Date: 10/29/08 Signed by: 
Division Administrator

Federal Highway Administration

Appendix A – S.R. 108 Mitigation Commitments

Exhibit A-1 provides a summary of the mitigation commitments for the construction and operation of S.R. 108.

Exhibit A-1: Summary of Mitigation Measures

Environmental Component	Mitigation Location	Mitigation Measures
Farmland	All project areas	Acquire farmland right-of-way in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (URAA), as amended.
Community	All project areas	<p>Public Health and Safety: Ensure that the locations of any raised medians will (1) not interfere with emergency service providers' ability to respond to emergencies and (2) allow for safe pedestrian crossing(s) near schools and busy commercial centers. Coordinate modifications with schools to ensure that roadway improvements maintain student safety at crossings. Take appropriate measures to maintain student safety near construction sites.</p> <p>Relocation: Acquire right-of-way in accordance with the URAA, as amended.</p> <p>Utility: Notify businesses and residents of any necessary loss of service and follow the Accommodation of Utilities and the Control and Protection of State Highway Rights-of-Way, Utah Administrative Code Rule 930-6 (UDOT).</p>
Economic	All project areas	Relocate acquired businesses according to the URAA, as amended; Title VI of the Civil Rights Act of 1964; and 49 CFR 24; Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs.
Air Quality and Transportation Conformity	All project areas	For PM ₁₀ mitigation, minimize construction emissions and non-tailpipe operational emissions through a variety of best management practices (BMPs).
Noise	Segment 8	<p>Wall 1: Located on the southeast side of Karol's Mobile Estates, 550 feet long and 16 feet high; would reduce noise by 4 dBA to 12 dBA.</p> <p>Wall 2: Located on the northeast side of Karol's Mobile Estates, 300 feet long and 12 to 18 feet high; would reduce noise by up to 6 dBA.</p> <p>Wall 3: Located on the south end of the Country Meadows Estates, 400 feet long and 12 to 18 feet high; would</p>

Environmental Component	Mitigation Location	Mitigation Measures
	Segment 9	<p>reduce noise by 9 dBA to 12 dBA.</p> <p>Wall 4: Located on the north end of the Country Meadows Estates, 425 feet long and 12 to 18 feet high; would reduce noise by 7 dBA to 13 dBA.</p> <p>Wall 5: Located adjacent to the new townhome development on the south side of the alignment, 360 feet long and 8 feet high; would reduce noise by 5 dBA to 9 dBA.</p> <p>Wall 6: Located on the south side of the alignment adjacent to the new townhome development, 950 feet long and 8 feet high; would reduce noise by 6 dBA to 10 dBA.</p>
Water Quality	All project areas	<p>Surface Water: Provide detention features where the capacity of the existing stormwater system is inadequate to convey the additional runoff flows or where the expected impact to the receiving water quality requires detention and treatment.</p> <p>Groundwater Rights and Wells: Work with property owner(s) to determine appropriate mitigation for any affected well head(s) or water right point(s) of diversion. Mitigation could include relocating well heads, diverting surface water, abandoning wells, or compensating the owner for the value of the water right.</p>
Ecosystem	All project areas	<p>Determine jurisdictional status of the drainage canals and isolated wetlands adjacent to S.R. 108; obtain Section 404 permit if appropriate under the Clean Water Act.</p> <p>Incorporate appropriate BMPs into the construction plan if there are impacts to the wetland; install environmental and silt fencing. Obtain all necessary permits and implement any required mitigation prior to construction.</p> <p>Wetland mitigation depends on jurisdictional status. No mitigation planned for ditches.</p>
Historic, Archaeological, and Paleontological Resources	All project areas	<p>A Memorandum of Agreement has been executed between FHWA and the Utah SHPO which specific mitigation measures to be implemented; it states that adverse impacts to historic properties will include a Utah State Intensive-Level Survey (ILS) before construction activities.</p> <p>In accordance with 36 CFR 800.13(b), provide for the protection, evaluation, and treatment of any historic property discovered prior to or during construction. Enforce Standard Specifications Section 01355, Part 1.13, Discovery of Historical, Archaeological, or Paleontological Objects, Features, Sites, Human Remains, or Migratory Avian Species.</p>
Hazardous Waste	All project areas	<p>Take measures to prevent the spread of contamination and limit worker exposure. Determine chemical hazard, if any, and take appropriate protective measures on site. If there is an identified chemical hazard, negotiate with the property owner prior to property acquisition and through the possible coordination with the Utah Division of Environmental Response and Remediation (DERR).</p> <p>If a previously unidentified site or contamination is encountered, stop all work in the contamination area. Contractor to consult with UDOT and DERR to determine appropriate remedial measures. Handle hazardous</p>

Environmental Component	Mitigation Location	Mitigation Measures
Visual Resources	All project areas	<p>wastes in accordance with UDOT Standard Specifications and the regulations of DERR.</p> <p>During construction, coordinate between UDOT, DERR, construction contractor and property owners. Determine status of sites of concern, identify new sites, identify nature and extent of remaining contamination, and minimize risk to all parties. Identify potential risks through environmental site assessments.</p> <p>Reduce visual impacts of the alternative. Consider aesthetic measures such as lighting, vegetation and plantings, and other architectural features during the final design. Include replacement landscaping in plans.</p>
Construction	All project areas	<p>Public Impacts: Implement thorough public information program to inform the public about construction activities and to minimize impacts. Mitigation measures will include information about work hours and alternate routes, construction signs to notify motorists of conditions, aiming lights directly at construction site during nighttime, and agreements to coordinate utility relocations.</p> <p>Air Quality: Require contractor to provide mitigation measures associated with maintaining a fugitive-dust-control program, street sweeping, and reducing equipment emissions. Other measures to consider include using newer, cleaner-emitting equipment; installing control equipment on diesel construction equipment; rerouting truck traffic away from schools and communities when reasonably practical; and considering the use of alternate engines and diesel fuels.</p> <p>Water Quality: Require a UPDES General Storm Water Discharge Permit.</p> <p>Noise: Comply with all state and local regulations relating to construction noise. Evaluate each construction area for the most appropriate measures to be taken.</p> <p>Visual: Prepare and implement an appropriate seeding vegetation and/or landscaping plan; maintain and keep a storage area in a reasonable condition of cleanliness and orderliness; and promptly remove unused or unnecessary equipment.</p> <p>Utility Service: Coordinate with utility companies to plan work activities so that utility disruptions to a business occur during closed or off-peak operational hours. Require contractor to contact Blue Stakes before beginning work to identify utility locations. Use care when excavating to avoid utility disruptions. Restore any disrupted utilities as quickly as possible.</p> <p>Traffic: Require contractor to develop a traffic plan that defines measures to minimize construction impacts on traffic with the general requirement that safe access to residences and businesses remains intact and existing roads are kept open to the extent practicable. Construction information will be communicated to the public.</p> <p>Economic: Maintain access to businesses during construction and post-construction phases of the project, coordinate with property owners to maintain access, place adequate signage to direct motorists, and consider further mitigation measures (provide a newsletter, place signs to identify business access, hold monthly meetings with business owners, and minimize noise and light impacts at night).</p> <p>Hazardous Materials: Take measures to prevent the spread of contamination and limit worker exposure. Determine chemical hazard, if any, and take appropriate protective measures on site. If there is an identified</p>

Environmental Component	Mitigation Location	Mitigation Measures
		<p>chemical hazard, negotiate with the property owner prior to property acquisition and through possible coordination with DERR.</p> <p>If a previously unidentified site or contamination is encountered, stop all work in the contamination area. Require contractor to consult with UDOT and DERR to determine appropriate remedial measures. Handle hazardous wastes in accordance with UDOT Standard Specifications and the regulations of DERR.</p> <p>During construction, coordinate between UDOT, DERR, construction contractor and property owners. Determine status of sites of concern, identify new sites, identify nature and extent of remaining contamination, and minimize risk to all parties. Identify potential risks through environmental site assessments.</p> <p>Construction Staging: Coordinate any necessary staging areas with UDOT to ensure that no sensitive environmental resources are affected. Require contractor to limit impacts and restore any disturbed vegetation or environment.</p> <p>Invasive Species: Implement and monitor UDOT's current Standard Specifications for Road and Bridge Construction.</p>